

1540
10/12
OIPPE

RAW SEQUENCE LISTING

DATE: 07/30/2001

PATENT APPLICATION: US/09/863,693

TIME: 12:28:23

Input Set : N:\Crf3\RULE60\09863693.txt

Output Set: N:\CRF3\07302001\I863693.raw

SEQUENCE LISTING

3 (1) GENERAL INFORMATION:
 5 (i) APPLICANT: ARATHOON, R.
 6 CARTER, P.J.
 7 MERCHANT, A.M.
 8 PRESTA, L.G.
 10 (ii) TITLE OF INVENTION: METHOD FOR MAKING MULTISPECIFIC ANTIBODIES
 11 HAVING HETEROMULTIMERIC AND COMMON COMPONENTS
 13 (iii) NUMBER OF SEQUENCES: 26
 15 (iv) CORRESPONDENCE ADDRESS:
 16 (A) ADDRESSEE: Genentech, Inc.
 17 (B) STREET: 1 DNA Way
 18 (C) CITY: South San Francisco
 19 (D) STATE: California
 20 (E) COUNTRY: USA
 21 (F) ZIP: 94080
 23 (v) COMPUTER READABLE FORM:
 24 (A) MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
 25 (B) COMPUTER: IBM PC compatible
 26 (C) OPERATING SYSTEM: PC-DOS/MS-DOS
 27 (D) SOFTWARE: WinPatin (Genentech)
 29 (vi) CURRENT APPLICATION DATA:
 C--> 30 (A) APPLICATION NUMBER: US/09/863,693
 C--> 31 (B) FILING DATE: 23-May-2001
 32 (C) CLASSIFICATION:
 34 (vii) PRIOR APPLICATION DATA:
 35 (A) APPLICATION NUMBER: 09/070,166
 36 (B) FILING DATE:
 38 (viii) ATTORNEY/AGENT INFORMATION:
 39 (A) NAME: Conley, Deirdre L.
 40 (B) REGISTRATION NUMBER: 36,487
 41 (C) REFERENCE/DOCKET NUMBER: P1099R1
 43 (ix) TELECOMMUNICATION INFORMATION:
 44 (A) TELEPHONE: 650/225-2066
 45 (B) TELEFAX: 650/952-9881
 46 (2) INFORMATION FOR SEQ ID NO: 1:
 48 (i) SEQUENCE CHARACTERISTICS:
 49 (A) LENGTH: 36 base pairs
 50 (B) TYPE: Nucleic Acid
 51 (C) STRANDEDNESS: Single
 52 (D) TOPOLOGY: Linear
 54 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:
 57 CTCTTCCCGA GATGGGGGCA GGGTGCACAC CTGTGG 36
 59 (2) INFORMATION FOR SEQ ID NO: 2:
 61 (i) SEQUENCE CHARACTERISTICS:
 62 (A) LENGTH: 21 base pairs
 63 (B) TYPE: Nucleic Acid

ENTERED

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```
64          (C) STRANDEDNESS: Single
65          (D) TOPOLOGY: Linear
67      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
70      CTCTTCCCGA CATGGGGGCA G 21
72  (2) INFORMATION FOR SEQ ID NO: 3:
74      (i) SEQUENCE CHARACTERISTICS:
75          (A) LENGTH: 21 base pairs
76          (B) TYPE: Nucleic Acid
77          (C) STRANDEDNESS: Single
78          (D) TOPOLOGY: Linear
80      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
83      GGTCATCTCA CACCGGGATG G 21
85  (2) INFORMATION FOR SEQ ID NO: 4:
87      (i) SEQUENCE CHARACTERISTICS:
88          (A) LENGTH: 24 base pairs
89          (B) TYPE: Nucleic Acid
90          (C) STRANDEDNESS: Single
91          (D) TOPOLOGY: Linear
93      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
96      CTTGGTCATA CATTACGGG ATGG 24
98  (2) INFORMATION FOR SEQ ID NO: 5:
100     (i) SEQUENCE CHARACTERISTICS:
101         (A) LENGTH: 30 base pairs
102         (B) TYPE: Nucleic Acid
103         (C) STRANDEDNESS: Single
104         (D) TOPOLOGY: Linear
106     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:
109     CTCTTCCCGA GATGGGGGAC AGGTGTACAC 30
111  (2) INFORMATION FOR SEQ ID NO: 6:
113     (i) SEQUENCE CHARACTERISTICS:
114         (A) LENGTH: 21 base pairs
115         (B) TYPE: Nucleic Acid
116         (C) STRANDEDNESS: Single
117         (D) TOPOLOGY: Linear
119     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:
122     GCCGTTCGAA CACAGCACGG G 21
124  (2) INFORMATION FOR SEQ ID NO: 7:
126     (i) SEQUENCE CHARACTERISTICS:
127         (A) LENGTH: 39 base pairs
128         (B) TYPE: Nucleic Acid
129         (C) STRANDEDNESS: Single
130         (D) TOPOLOGY: Linear
132     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:
135     CTGGGAGTCT AGAACGGGAG GCGTGGTACA GTAGTTGTT 39
137  (2) INFORMATION FOR SEQ ID NO: 8:
139     (i) SEQUENCE CHARACTERISTICS:
140         (A) LENGTH: 33 base pairs
141         (B) TYPE: Nucleic Acid
142         (C) STRANDEDNESS: Single
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143         (D) TOPOLOGY: Linear
145     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:
148     GTCGGAGTCT AGAACGGGAG GACAGGTCTT GTA 33
150 (2) INFORMATION FOR SEQ ID NO: 9:
152     (i) SEQUENCE CHARACTERISTICS:
153         (A) LENGTH: 21 base pairs
154         (B) TYPE: Nucleic Acid
155         (C) STRANDEDNESS: Single
156         (D) TOPOLOGY: Linear
158     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:
161     GTCGGAGTCT AGACAGGGAG G 21
163 (2) INFORMATION FOR SEQ ID NO: 10:
165     (i) SEQUENCE CHARACTERISTICS:
166         (A) LENGTH: 21 base pairs
167         (B) TYPE: Nucleic Acid
168         (C) STRANDEDNESS: Single
169         (D) TOPOLOGY: Linear
171     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10:
174     GCCGTCGGAG CTCAGCACGG G 21
176 (2) INFORMATION FOR SEQ ID NO: 11:
178     (i) SEQUENCE CHARACTERISTICS:
179         (A) LENGTH: 24 base pairs
180         (B) TYPE: Nucleic Acid
181         (C) STRANDEDNESS: Single
182         (D) TOPOLOGY: Linear
184     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11:
187     GGGAGGCGTG GTGCTGTAGT TGTT 24
189 (2) INFORMATION FOR SEQ ID NO: 12:
191     (i) SEQUENCE CHARACTERISTICS:
192         (A) LENGTH: 38 base pairs
193         (B) TYPE: Nucleic Acid
194         (C) STRANDEDNESS: Single
195         (D) TOPOLOGY: Linear
197     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 12:
200     GTTCAGGTGC TGGGCTCGGT GGGCTGTGT GAGTTTGT 38
202 (2) INFORMATION FOR SEQ ID NO: 13:
204     (i) SEQUENCE CHARACTERISTICS:
205         (A) LENGTH: 821 base pairs
206         (B) TYPE: Nucleic Acid
207         (C) STRANDEDNESS: Single
208         (D) TOPOLOGY: Linear
210     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 13:
213     AACGCGTACG CTCTGAAAAT GCGGACCCG AACCGTTTTT GTGGTAAAGA 50
215     TCTGGCTGCA CACTACGGCC AGCCGCGGGA ACCTCAGGTG TATACCCTGC 100
217     CACCGTCTCG AGAAGAAATG ACTAAAAACC AGGTCTCTCT GTGGTGCCTG 150
219     GTCAAAGGTT TCTATCCGAG CGATATCGCC GTGGAATGGG AAAGCAACGG 200
221     TCAACCGGAA AACAACTACA AAACCACTCC ACCGGTGCTG GATTCTGATG 250
223     GCTCCTTCTT TCTGTATTCG AAGCTGACCG TTGACAAAAG CCGTTGGCAG 300
225     CAAGGCAACG TTTTCAGCTG TTCTGTTATG CACGAGGCCT TGCACAACCA 350

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227 CTACACCCAG AAAAGCCTGT CCCTGTCTCC CGGGAAATAA GCTGAGGCTC 400
229 CTCTAGAGGT TGAGGTGATT TTATGAAAAA GAATATCGCA TTTCTTCTTG 450
231 CATCTATGTT CGTTTTTCTT ATTGCTACAA ACGCGTACGC TGGGCAGCCC 500
233 CGAGAACCAC AGGTGTACAC CCTGCCCCCA TCCCGGGAAG AGATGACCAA 550
235 GAACCAGGTA AGCTTGTA CTGCTGGTCAA AGGCTTCTAT CCCAGCGACA 600
237 TCGCCGTGGA GTGGGAGAGC AATGGGCAGC CGGAGAACAA CTACAAGACC 650
239 ACGCCTCCCG TGCTGGACTC CGACGGCTCC TTCTTCCTCT ACAGCTTTCT 700
241 CACCGTCGAC AAGAGCAGGT GGCAGCAGGG GAACGTCTTC TCATGCTCCG 750
243 TGATGCATGA GGCTCTGCAC AACCCTACA CGCAGAAGAG CCTCTCCCTG 800
245 TCTCCGGGTA AATAGGGGCC C 821
247 (2) INFORMATION FOR SEQ ID NO: 14:
249 (i) SEQUENCE CHARACTERISTICS:
250 (A) LENGTH: 50 amino acids
251 (B) TYPE: Amino Acid
252 (D) TOPOLOGY: Linear
254 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14:
256 Ser Asn Arg Phe Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu
257 1 5 10 15
259 Thr Ile Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys
260 20 25 30
262 Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val Phe Gly Gly Gly Thr
263 35 40 45
265 Lys Leu Thr Val Leu
266 50
268 (2) INFORMATION FOR SEQ ID NO: 15:
270 (i) SEQUENCE CHARACTERISTICS:
271 (A) LENGTH: 50 amino acids
272 (B) TYPE: Amino Acid
273 (D) TOPOLOGY: Linear
275 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 15:
277 Ser Asn Arg Phe Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu
278 1 5 10 15
280 Thr Ile Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys
281 20 25 30
283 Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val Phe Gly Gly Gly Thr
284 35 40 45
286 Lys Leu Thr Val Leu
287 50
289 (2) INFORMATION FOR SEQ ID NO: 16:
291 (i) SEQUENCE CHARACTERISTICS:
292 (A) LENGTH: 50 amino acids
293 (B) TYPE: Amino Acid
294 (D) TOPOLOGY: Linear
296 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 16:
298 Ser Asn Arg Phe Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu
299 1 5 10 15
301 Thr Ile Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys
302 20 25 30
304 Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val Phe Gly Gly Gly Thr

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305          35          40          45
307 Lys Leu Thr Val Leu
308          50
310 (2) INFORMATION FOR SEQ ID NO: 17:
312 (i) SEQUENCE CHARACTERISTICS:
313 (A) LENGTH: 50 amino acids
314 (B) TYPE: Amino Acid
315 (D) TOPOLOGY: Linear
317 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 17:
319 Ser Asn Arg Phe Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu
320 1          5          10          15
322 Thr Ile Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys
323          20          25          30
325 Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val Phe Gly Gly Gly Thr
326          35          40          45
328 Lys Leu Thr Val Leu
329          50
331 (2) INFORMATION FOR SEQ ID NO: 18:
333 (i) SEQUENCE CHARACTERISTICS:
334 (A) LENGTH: 50 amino acids
335 (B) TYPE: Amino Acid
336 (D) TOPOLOGY: Linear
338 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 18:
340 Ser Asn Arg Phe Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu
341 1          5          10          15
343 Thr Ile Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys
344          20          25          30
346 Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val Phe Gly Gly Gly Thr
347          35          40          45
349 Lys Leu Thr Val Leu
350          50
352 (2) INFORMATION FOR SEQ ID NO: 19:
354 (i) SEQUENCE CHARACTERISTICS:
355 (A) LENGTH: 50 amino acids
356 (B) TYPE: Amino Acid
357 (D) TOPOLOGY: Linear
359 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 19:
361 Ser Asn Arg Phe Ser Gly Ser Lys Ser Gly Ser Thr Ala Ser Leu
362 1          5          10          15
364 Thr Ile Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys
365          20          25          30
367 Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val Phe Gly Gly Gly Thr
368          35          40          45
370 Lys Leu Thr Val Leu
371          50
373 (2) INFORMATION FOR SEQ ID NO: 20:
375 (i) SEQUENCE CHARACTERISTICS:
376 (A) LENGTH: 50 amino acids
377 (B) TYPE: Amino Acid

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VERIFICATION SUMMARY

PATENT APPLICATION: US/09/863,693

DATE: 07/30/2001

TIME: 12:28:24

Input Set : N:\Crf3\RULE60\09863693.txt

Output Set: N:\CRF3\07302001\I863693.raw

L:30 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]

L:31 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]

L:382 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20

L:550 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26

L:577 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26